

41. (Amended) A method of determining motor oil quality, comprising the steps of:

C2  
determining a viscosity of the motor oil during operation of an internal combustion engine;

determining and evaluating a change of the viscosity of the motor oil determined in the viscosity determining step as a function of a temperature and frictional torque of the engine; and

determining starter torque, the viscosity change determining and evaluating step including the substep of determining the frictional torque in accordance with the starter torque.

C3  
43. (Amended) The method according to claim 41, wherein the viscosity change determining and evaluating step includes the substep of determining the frictional torque in accordance with the starter torque and a consumed engine acceleration power.

44. (Amended) A method of determining motor oil quality, comprising the steps of:

determining a viscosity of the motor oil during operation of an internal combustion engine;

determining and evaluating a change of the viscosity of the motor oil determined in the viscosity determining step as a function of a temperature and frictional torque of the engine; and

determining whether the change of the viscosity is outside a range of -15% to +50% of a predefined viscosity value at a same temperature, the viscosity change determining and evaluating step being performed in accordance with the step of determining whether the change of the viscosity is outside the range of -15% to +50% of the predefined viscosity value at the same temperature.

C4  
48. (Amended) A method of determining viscosity of motor oil of an internal combustion engine, comprising the steps of:

determining an engine frictional torque; and

determining the viscosity of the motor oil in accordance with the engine frictional torque;

wherein the engine frictional torque is determined in the engine frictional torque determining step in accordance with engine data available in an engine controller; and

wherein the engine data includes:

an engine torque generated in accordance with at least one of an injection time and a throttle valve position;

a signal that indicates whether a torque is transmitted to a drive train; and

at least one signal relating to an operating condition of at least one auxiliary unit driven by the engine.

C4  
49. (Amended) A method of determining viscosity of motor oil of an internal combustion engine, comprising the steps of:

determining an engine frictional torque; and

determining the viscosity of the motor oil in accordance with the engine frictional torque;

wherein the engine frictional torque is determined in the engine frictional torque determining step in accordance with engine data available in an engine controller; and

wherein the internal combustion engine is a diesel engine, the engine data including:

a signal that indicates whether a torque is transmitted to a drive train;

a load signal of a generator as a measure of an electric power generated by a generator;

an engine rpm;

an injected amount of fuel;

an engine temperature; and

an ambient temperature.

50. (Amended) A method of determining viscosity of motor oil of an internal combustion engine, comprising the steps of:

determining an engine frictional torque;